WHAT IS CLAIMED IS:

1. An electro-kinetic air transporter-conditioner, comprising:

a housing defining at least one vent; and

a self-contained ion generator, disposed within said housing;

said ion generator producing ionized air that flows electrostatically from said vent.

2. The transporter-conditioner of claim 1, wherein said ion generator includes:

a high voltage generator outputting a signal whose duty cycle may be varied from about 10% to about 100%;

an electrode assembly comprising a first electrode array effectively coupled to a first output port of said generator, and a second electrode array effectively coupled to a second output port of said generator, wherein one said output port may be at a same potential as ambient air;

wherein particulate matter in ambient air is electrostatically attracted to said second electrode array, and wherein said ion generator further creates ozone that flows electrostatically from said vent.

3. The transporter-conditioner of claim 2, wherein said high voltage generator has a characteristic selected from a group consisting of (a) said high voltage generator provides a first potential measurable relative to ground to said first electrode array and provides a second potential measurable relative to ground to said second electrode array, and (b) said high voltage generator provides a first positive potential measurable relative to ground to said first electrode array and provides a second negative potential measurable relative to ground to said second electrode array.

4. The transporter-conditioner of claim 2, wherein:

said first electrode array includes at least one electrode selected from a group consisting of (i) an electrically conductive tapered pin-shaped electrode, and (ii) a portion of conductive material having a end defining a plurality of projecting conductive fibers; and

said second electrode array includes an electrically conductive ring-shaped electrode defining a central through opening, said second electrode disposed coaxial with and in a downstream direction from an emitting end of an electrode in said first electrode array.

5. The transporter-conditioner of claim 4, wherein said first electrode array includes at least one said pin-shaped electrode, and said second electrode array has at least one characteristic selected from a group consisting of (i) said ring-shaped electrode defines in cross-section a tapered region terminating towards said central through opening, (ii) said ring-shaped electrode defines in cross-section a rounded region terminating towards said central through opening, (c) said ring-shaped electrode defines in cross-section a rounded profile terminating in said through opening, (d) a ratio of effective radius of said ring-shaped electrode to effective radius of said pin-shaped electrode exceeds about 15:1, (e) said pin-shaped electrode includes tungsten, (f) said pin-shaped electrode includes stainless steel, (g) said pin-shaped electrode includes projecting fibers of carbon, and (h) said ring-shaped electrode includes stainless steel.

5. The transporter-conditioner of claim 2, wherein:

said first electrode array includes at least one metal wire electrode; and

said second electrode array includes at least two electrically conductive electrodes that in cross-section

define a "U"-shape having a bulbous nose region and first and second trailing edge regions;

the "U"-shaped electrodes being disposed such that said bulbous nose regions facing said metal wire electrode and are equidistant therefrom.

6. The transporter-conditioner of claim 5, wherein an electrode in said second electrode array has at least one characteristic selected from a group consisting of (i) a portion of one trailing edge region is longer than a remaining trailing edge region on said electrode, (ii) said trailing edge region defines at least one pointed projection facing downstream, and (iii) a ratio of effective radius of an electrode in said second electrode array to effective radius of said metal wire electrode exceeds about 15:1.

7. The transporter-conditioner of hair brush of claim 2, wherein:

said first electrode array includes at least one metal wire electrode; and

said second electrode array includes at least two electrically conductive electrodes that in cross-section define an "L"-shape having a curved nose region;

the "L"-shaped electrodes being disposed such that said curved nose regions face said metal wire electrode and are equidistant therefrom.

8. The transporter-conditioner of claim 2, wherein:

said first electrode array includes at least one metal wire electrode; and

said second electrode array includes at least two rod-like electrically conductive electrodes;

the rod-like electrodes being disposed such that said curved nose regions face said metal wire electrode and are equidistant therefrom.

9. The transporter-conditioner of claim 8, wherein a ratio of radius of one of said rod-like electrodes to radius of said wire electrode exceeds about 15:1.

10. The transporter-conditioner of claim 2, further including a bias electrode for determining net polarity of ions generated by said transporter-conditioner.

11. An electro-kinetic air transporter-conditioner, comprising:

a housing defining at least one vent; and

a self-contained ozone generator, disposed within said housing;

said ozone generator producing ozone that flows electrostatically from said vent to condition ambient air.

12. The electro-kinetic air transporter-conditioner of claim 11, wherein said ozone generator includes an ion generator comprising:

a high voltage generator outputting a signal whose duty cycle may be varied from about 10% to about 100%;

an electrode assembly comprising a first electrode array effectively coupled to a first output port of said generator, and a second electrode array effectively coupled to a second output port of said generator, wherein one said port may be at a same potential as ambient air;

said ion generator further creating ozone that flows electrostatically from said vent.

13. The electro-kinetic air transporter-conditioner of claim 12, wherein:

said first electrode array includes at least one electrode selected from a group consisting of (i) an electrically conductive tapered pin-shaped electrode, and

(ii) a portion of conductive material having a end defining a plurality of projecting conductive fibers; and

said second electrode array includes an electrically conductive ring-shaped electrode defining a central through opening, said second electrode disposed coaxial with and in a downstream direction from an emitting end of an electrode in said first electrode array.

14. The electro-kinetic air transporter-conditioner of claim 13, wherein said first electrode array includes at least one said pin-shaped electrode, and said second electrode array has at least one characteristic selected from a group consisting of (i) said ring-shaped electrode defines in cross-section a tapered region terminating towards said central through opening, (ii) said ring-shaped electrode defines in cross-section a rounded region terminating towards said central through opening, (c) said ring-shaped electrode defines in cross-section a rounded profile terminating in said through opening, (d) a ratio of effective radius of said ring-shaped electrode to effective radius of said pin-shaped electrode exceeds about 15:1, (e) said pin-shaped electrode includes tungsten, (f) said pin-shaped electrode includes stainless steel, (g) said pin-shaped electrode includes projecting fibers of carbon, and (h) said ring-shaped electrode includes stainless steel.

15. The electro-kinetic air transporter-conditioner of claim 12, wherein:

said first electrode array includes at least one metal wire electrode; and

said second electrode array includes at least two electrically conductive electrodes that in cross-section define a "U"-shape having a bulbous nose region and first and second trailing edge regions;

the "U"-shaped electrodes being disposed such that said bulbous nose regions facing said metal wire electrode and are equidistant therefrom.

16. The electro-kinetic air transporter-conditioner of claim 12, wherein an electrode in said second electrode array has at least one characteristic selected from a group consisting of (i) a portion of one trailing edge region is longer than a remaining trailing edge region on said electrode, (ii) said trailing edge region defines at least one pointed projection facing downstream, and (iii) a ratio of effective radius of an electrode in said second electrode array to effective radius of said metal wire electrode exceeds about 15:1.

17. The electro-kinetic air transporter-conditioner of claim 12, wherein:

said first electrode array includes at least one metal wire electrode; and

said second electrode array includes at least two electrically conductive electrodes that in cross-section define an "L"-shape having a curved nose region;

the "L"-shaped electrodes being disposed such that said curved nose regions face said metal wire electrode and are equidistant therefrom.

18. The electro-kinetic air transporter-conditioner of claim 12, wherein:

said first electrode array includes at least one metal wire electrode; and

said second electrode array includes at least two rod-like electrically conductive electrodes;

the rod-like electrodes being disposed such that said curved nose regions face said metal wire electrode and are equidistant therefrom.

19. The electro-kinetic air transporter-conditioner of claim 18, wherein a ratio of radius of one of said rod-like electrodes to radius of said wire electrode exceeds about 15:1.

20. A method of electro-kinetically providing a flow of cleaned air containing ions and ozone, the method comprising:

(a) providing a housing that includes an ion generator having an electrode assembly comprising a first electrode array and a second electrode array; and

(b) disposing within said housing a high voltage generator having a first output port electrically coupled to said first electrode array, and having a second output port electrically coupled to said second electrode array, wherein one said port may be at a potential of ambient air;

wherein at least some ambient air is ionized and electrostatically moved through said housing, said ionized air including ozone.

21. The method of claim 21, wherein:

said first electrode array includes at least one metal wire electrode; and

said second electrode array includes at least two electrically conductive electrodes that in cross-section define a "U"-shape having a bulbous nose region and first and second trailing edge regions;

the "U"-shaped electrodes being disposed such that said bulbous nose regions facing said metal wire electrode and are equidistant therefrom.

22. The method of claim 21, further including a bias electrode, coupled to said second electrode array so as to control charge of ions output from said housing.

23. The method of claim 21, wherein:

said first electrode array includes an electrically conductive tapered pin-shaped electrode;

said second electrode array includes an electrically conductive ring-shaped electrode defining a central through opening and being electrically coupled to a second output port of said generator, said second electrode being disposed coaxial with and in a downstream direction from a tapered end of said tapered pin-shaped electrode.

24. The method of claim 21, wherein:

said first electrode array includes at least one metal wire electrode; and

said second electrode array includes at least two electrically conductive rod-like electrodes; said rod-like electrodes being equidistant from said metal wire electrode.

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